Northern Territory Naturalist

MAMMALS OF LAKE NASH AND GEORGINA DOWNS STATIONS AND A FIRST RECORD OF THE NARROW-NOSED PLANIGALE, PLANIGALE TENUIROSTRIS, FROM THE NORTHERN TERRITORY

W.A. Low and B.W. Strong W.A. Low Ecological Services, P.O. Box 3130, Alice Springs, N.T. 5750

The distribution of small mammal species in the Northern Territory is poorly known. Parker (1973) details the distributions of known specimens in the Northern Territory up to 1971 and Strahan (1983) provides the latest summary of distributions in Australia.

In August 1984 a resource survey was made of the 8547 km^2 Lake Nash and 3472 km^2 Georgina Downs pastoral properties on the south edge of the Mitchell Grass (*Astrebla spp.*) plains of the Barkly Tableland adjacent to the Queensland border (21° 50′, 137° 30′). The survey covered the major habitats which include Mitchell Grass/cracking clay plains, *Acacia* shrubland/lateritic hills and Coolibah (*Eucalyptus microtheca*)/riparian clay channels. Surveys were made using Elliott and pit trapping, observation of animals and sign, analysis of Barn Owl *Tyto alba* pellets, and gathering museum and literature records.

The species of mammals known to occur currently on Lake Nash and Georgina Downs are shown in Table 1 which also indicates the source of the data.

An interesting, though not unexpected, first collection in the Northern Territory was that of Planigale tenuirostris, the Narrow-nosed Planigale. The species' distribution is associated with cracking clay soils in inland N.S.W., Qld and S.A. (Read 1983; Andrew & Settle 1982). Our specimen, comprising two dentaries, was collected from a Barn Owl pellet taken from a hollow Coolibah trunk on the Gordon Creek in the south west of Lake Nash at 21°42, 137° 17' in Tobermorey Land System (Christian et al, 1954). The surrounding cracking clay soils were moderately densely vegetated with Aristida, and Sida spp. and a variety of low forbs and grasses and Acacia spp. The creek channel and fringe was heavily vegetated with Enteropogon and Themeda under Coolibah. While it cannot be certain where the owl had captured the prey, it was probably within several kilometres of the roost tree. Other species collected in the owl pellets at the site were House Mouse Mus musculus, Fat-tailed Dunnart Sminthopsis crassicaudata, Stripe-faced Dunnart S. macroura, and Forrest's Mouse Leggadina forresti. The Fat-tailed Dunnart is near the northern limit of known distribution in Australia (Strahan 1983).

The status of the species observed is shown in Table 1. Our rapid reconnaissance survey permitted only a subjective assessment of abundance of species from observations of individuals, tracks and sign. The abundance of Red Kangaroos has increased in the last four or five years according to the Manager. This coincides with Dingo control efforts but also with increased rainfall.

The rumoured presence of the Northern Nailtail Wallaby Onychogalea unguifera in Camil and Camilrock Land System on Georgina Downs could not be confirmed. A possible feeding hole of a Greater Bilby Macrotis lagotis, in a patch of Yelka (Cyperus sp.) suggested that the species may persist at the south of Lake Nash in Warnardo and Tobermorey Land Systems.

No feral pigs, camels, donkeys, horses or cattle occur on the station. This is due to lack of surface waters during the prolonged dry season (apart from bores and dams which can be closed off) which prevents establishment and facilitates control of feral manimals.

Acknowledgements

This survey was done while we were under contract to the Conservation Commission of the N.T. The analysis of the owl pcllets was done by Jeff Cole and identification was made by Jeff and Dave Gibson; thanks to both. The cooperation of Percy Crumblin, Manager of Lake Nash and Georgina Downs Pastoral Stations, is greatly appreciated.

References

ANDREW, D.L. and G.A. SETTLE. 1982. Observations on the behaviour of species of Planigale (Dasyuridae, Marsupialia) with particular reference to the Narrow-nosed Planigale *Planigale tenuirostris*. 311 - 324 in Archer, M. (Ed) *Carnivorous Marsupials*. Bcatty:Sydney

CHRISTIAN, C.S. et al. 1954. Survey of the Barkly Region, 1947 - 48. Land Research Series No. 3. CSIRO: Melbourne.

PARKER, S.A. 1973. An annotated checklist of the native land mammals of the Northern Territory. *Records of the South Australian Museum* 16 (1).

READ, D.G. 1983. Narrow-nosed Planigale, Planigale tenuirostris. In Strahan, R. (Ed.) 1983. The Australian Museum Complete Book of Australian Mammals. Angus and Robertson: Sydney: 77 - 8

STRAHAN R., (ed.) 1983. The Australian Museum Complete Book of Australian Mammals. Angus and Robertson: Sydney.

Table 1: Mammals known to occur on Lake Nash and Georgina Downs Station, N.T.

Scientific Name	Common Name	Record Type	Land System; Status
Tachyglossus aculeatus	Short-beaked Echidna	O: dung	Tobermorey; occasional
Planigale tenuirostris	Narrow-nosed Planigale	Owl pellet	Tobermorey;?
Sminthopsis crassicaudata S. macroura	Fat-tailed Dunnart Stripe-faced Dunnart	Owl pellet Owl pellet	Tobermorey;? Tobermorey;?
Macropus rufus	Red Kangaroo	0	Ag,At,Kl,G,Wd, T; mod. common
Leggadina forresti	Forrest's Mouse	Owl pellet,*	T;?
Mus musculus Notomys alexis	House Mouse Spinifex Hopping-	С	Cl; common
	Mouse	С	Cl; common;
Rattus villosissimus	Long-haired Rat	*	;plague in 1960's, none since 1979
Canis familiaris dingo	Dingo	0 *	most;mod.common
Felis catus	Feral Cat	0	Cl,Ck; common
Oryctolagus cuniculus	European Rabbit	0	Ag,At,T,Wd,Ck; Sparse

Notes: Symbols used are:

- O Observed
- C Collected * - Held in Central Australian Museum Collection

Ag - Argadargada At - Austral B - Barkly Ck - Camilrock Cl - Camil

Land Systems:

Kl - Kallala T - Tobermorey Wd - Wonardo G - Georgina

5